MATSKOV, F.F.; MANZYUK, S.G.; ZAKREVSKAYA, L.Ye.

Vitamin B group in the grain of hybrid and self-pollinated lines of corn. Fiziol.rast. 12 no.6:1024-1028 N-D '65.
(MIRA 18:12)

1. Ukrainskiy ordena Lenina nauchno-issledovatel'skiy institut rasteniyevodstva, selektsii i genetiki imeni V.Ya.Yur'yeva, Khar'kov. Submitted May 6, 1965.

MATSKOV, P.P.

In memory of Academician Vladimir Mikhailovich Liubimenko; on the 85th anniversary of his birth and 20th anniversary of his death. Ukr. bot. zhur. 15 no.1:105-109 '58. (MIRA 11:5)
(Liubimenko, Vladimir Mikhailovich, 1873-1937)

MATSKOV, G.

History of contacts between Latvian and Russian literature (in the 1890's). Vestis Latv ak no.8:13-19 '61.

1. Akademiya nauk Latviyskoy SSR, Institut yazyka i literatury.

MATSKOVICH, S. F., Docent

"General Problem of Supplying Crossties and Its Solution for the Railroads of Western Siberia." Sub 28 May 47, Moscow Order of Lenin Inst of Railroad Engineers imeni I. V. Stalin

Dissertations presented for degrees in science and engineering in Moscow in 1947

SO: Sum No. 457, 18 Apr 55

BARATOV, B.I., kand.tekhn.nauk; MATS'KOVSKAYA, A.G., inzh.

Comments on V.I.Belov and B.I.Medvedev's article "Air temperature in longwalls as a factor limiting the length of longwalls." Bezop.truda v prom. 3 no.10:25-26 O '59. (MIRA 13:2)

1. Institut teploenergetiki AN USSR.
(Coal mines and mining) (Belov, V.I.)
(Medvedev, B.I.)

MATSKOVSKAYA, T. [Matskouskaia, T.]

Praiseworthy initiative. Rab.i sial. 36 no.8:9 Ag '60.
(MIRA 13:10)
(Minsk—Kindergarten)

GORDOE, Grigoriy Mikhaylovich; ALADZHALOV, Ivan Aleksandrovich; PEYSAKHOV, I.L., kandidat tekhnicheskikh nauk; retsenzent; KARCHEVSKIY, V.A., inzhener; retsenzent; MATSKOVSKIY, R.S., inzhener, retsenzent; KARCHEVSKIY, V.A., redaktor; ARKHANGEL'SKAYA, M.S., redaktor; YEFIMOVA, A.P., tekhnicheskiy redaktor.

[Gas purification by bag filters in nonferrous metallurgy] Gazoochistka rukavnymi fil'trami v tsvetnoi metallurgii. Moskva, Ges. nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1956. 204 p. (MLRA 9:6)
(Filters and filtration)(Dust--Removal)(Nonferrous metal industries)

MATSKRLE, S. L.

MATSKRLE, S. L. -- "Investigation of the Process of Adhesion of Suspended Matter in a Mesh-type and Suspended Filter for Water Purification Purposes." Min for the Construction of Enterprises of the Metallurgical and Chemical Industries of the USSR, Technical Administration of the All-Union Sci Res Inst of Water Supply, Canalization, Hydrotechnical Installations, and Hydrogeological Engineering, Moscow, 1956. (Dissertation for the Degree of Candidate of Technical Sciences)

SO: Knizhnaya Letopis' No 44, October 1956

MATSNEV, A.I.

Sewage from a viscose plant. Trudy NPI 114:19-29 '61.
(MIRA 15:2)
(Sewage disposal)

MATSNEV, A.I.

Retention of carbon disulfide, hydrogen sulfide and zinc in the purification by flotation of the waste waters of viscose production. Trudy NPI 138:19-25 '63. (MIRA 16:10)

YAKIMOV, G.V.; MATSNEV, A.I.

Technology of the purification of waste waters of the Barnaul Factory of Rayon and Synthetic Fibers by the flotation method. Trudy NPI 157:9-18 '64. (MIRA 19:1)

PLESHAKOV, V.D.; MATSNEV, A.I.

Utilization of wastes from the hydraulic ash removal in heat and electric power plants for the neutralization and additional purification of waste waters from viscose production. Trudy NPI 157:29-37 '64. (MIRA 19:1)

PLESHAKOV, V.D.; MATSNEV, A.I.; SINEV, O.P.

Testing of clarifiers with suspended precipitate in the purification of waste waters from viscose manufacture. Trudy NPI 157:39-45 '64. (MIRA 19:1)

MATSNEV, Anatoliy Ivanovich; GAYDAY, V.K., red.

[Using flotation for the purification of waste water] Primenenie flotatsii dli ochistki stochnykh vod. Kiev, Budivel'nyk, 1965. 57 p. (MIRA 18:9)

S/135/62/000/004/006/016/
A006/A101

18.1130

AUTHORS: Shorshorov, M. Kh., Candidate of Technical Sciences, Sokolov, Yu. V., Engineer, Russiyan, A. V., Candidate of Technical Sciences, Matsnev, E. P., Engineer, Kurkina, N. I., Candidate of Technical Sciences

TITLE: The effect of the composition and structure of chrome-nickel steels and alloys on hot crack formation in the weld-adjacent zone

PERIODICAL: Svarochnoye proizvodstvo, no. 4, 1962, 12-17

TEXT: The authors studied the effect of some alloying elements, such as boron, aluminum, titanium, carbon and others, and also of the initial state of various steels and alloys on changes in their ductility and strength under thermal cycle conditions of the weld-adjacent zone in welding. The investigation was carried out by the ИМЕТ-1 (IMET-1) method described in references 6 and 7. The results of the investigation are given in a table which contains also data on martensite, austenite-martensite and austenite-ferrite steel for comparison with chrome-nickel austenite steels and nickel alloys. The following conclusions are drawn. The proneness of alloys with similar alloying systems, to hot crack formation can be comparatively evaluated from the temperature when ductility and

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The effect of the composition ...

strength, determined in impact tension under conditions of the thermal welding cycle, are beginning to be recovered. Chrome-nickel austenite steels are more prone to hot crack formation in the weld-adjacent zone than austenite-ferrite, austenite-martensite and martensite steels. Cracking sensitivity of austenite steels increases with a higher nickel content. Proneness to hot cracks in the weld-adjacent zone of chrome-nickel austenite steels and nickel alloys increases with a higher content of boron, aluminum, titanium and carbon. However, in nickel alloys, the negative effect of boron is very marked at a higher content ($> 0.01 - 0.02\%$) than in austenite steels ($\sim 0.005 - 0.007\%$). Proneness to hot cracks in the weld-adjacent zone of austenite steels and nickel alloys can be reduced by refining the base metal with the aid of electric slag remelting or vacuum melting, grain refining, and increasing the quenching temperature within the limits of a permissible grain size. All these methods reduce segregation of alloying elements and harmful impurities at the grain boundaries: the former, indirectly, by reducing the total amount of impurities in the alloy and by their more uniform distribution; the latter two, directly, by reducing the concentration of elements and impurities at the boundaries. The study was carried out with the participation of Engineer V. V. Belov, and Candidate of Technical Sciences V. S. Sedykh from the Institute of Metallurgy imeni A. A.

The effect of the composition ...

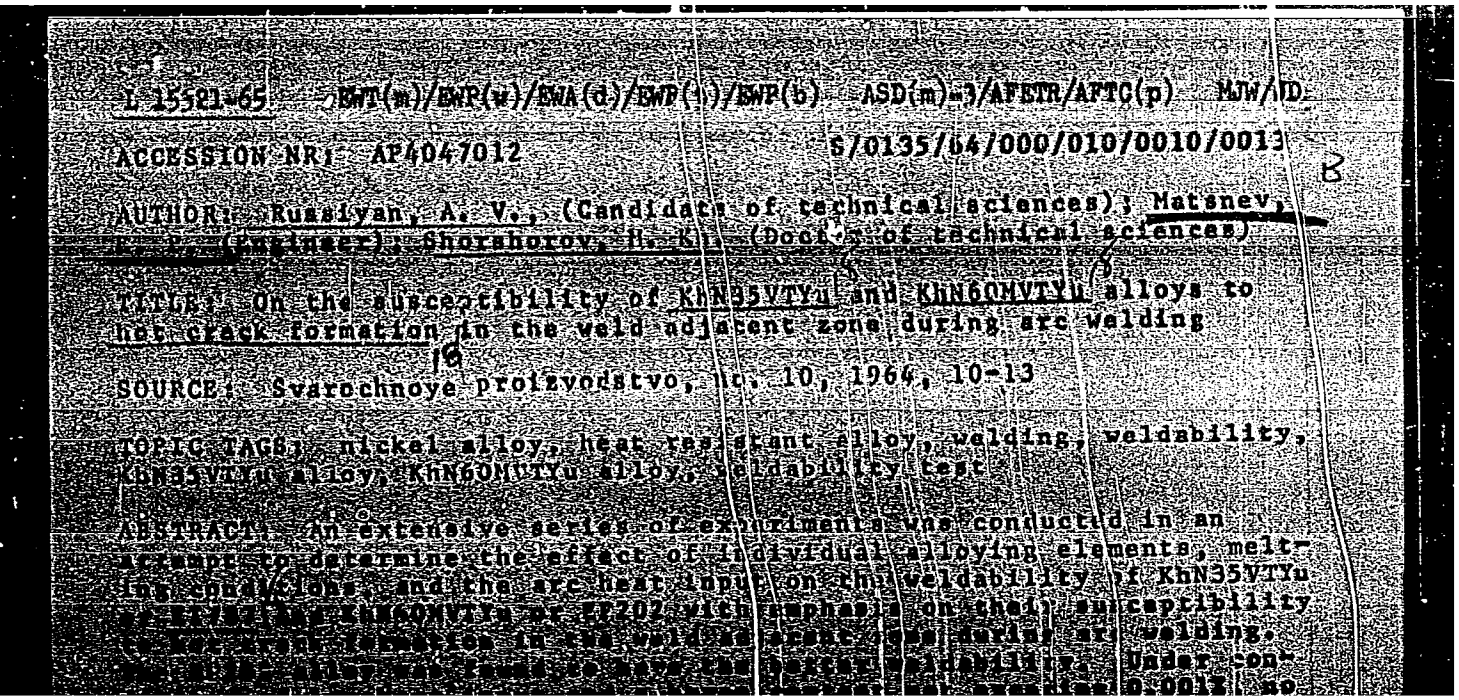
Baykov and Engineer Yu. P. Glukhov. The authors thank Candidate of Technical Sciences V. N. Zemzin from the TsKTI imeni I. I. Polzunova, for his assistance. There are 5 figures, 1 table and 8 references: 6 Soviet-bloc and 2 non-Soviet-bloc.

ASSOCIATIONS: Institut metallurgii imeni A. A. Baykova (Institute of Metallurgy imeni A. A. Baykov)(Shorshorov and Sokolov); TsNIIChM imeni I. P. Bardin (Russiyan and Matsev)

Card 3/3

RUSSIYAN, A.V.; MATSNEV, E.P.; PUTIMTSEVA, O.I.

Studying the resistance of the KhN35VTIU alloy to the formation of hot cracks in the weld zone. Sbor. trud TSNIICHM no.35:143-153 '63. (MIRA 17:2)



L 15521-65 EWT(m)/EWP(w)/EWA(d)/EWP(t)/EWP(b) ASD(m)-3/AFETR/AFTC(p) MJW/WD

ACCESSION NR: AP4047012 S/0135/64/000/010/0010/0013

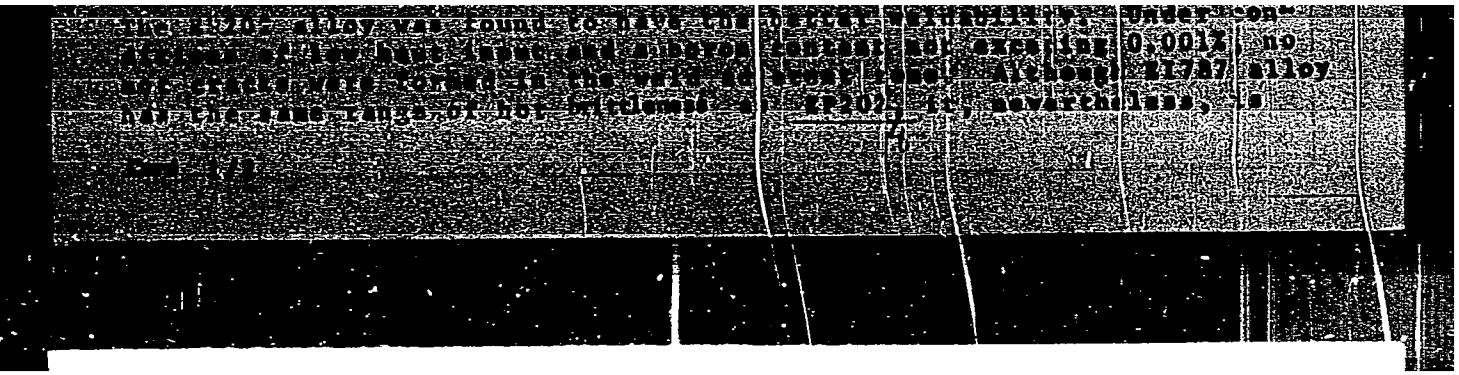
AUTHOR: Russlyan, A. V. (Candidate of technical sciences); Matsney, [illegible] P. (Engineer); Shorshorov, M. Kh. (Doctor of technical sciences)

TITLE: On the susceptibility of KhN35VTYu and KhN60MVTYu alloys to hot crack formation in the weld adjacent zone during arc welding

SOURCE: Svarochnoye proizvodstvo, no. 10, 1964, 10-13

TOPIC TAGS: nickel alloy, heat resistant alloy, welding, weldability, KhN35VTYu alloy, KhN60MVTYu alloy, weldability test

ABSTRACT: An extensive series of experiments was conducted in an attempt to determine the effect of individual alloying elements, melting conditions, and the arc heat input on the weldability of KhN35VTYu [illegible] KhN60MVTYu [illegible] with emphasis on their susceptibility [illegible] to hot crack formation in the weld adjacent zone during arc welding. Under con- [illegible] no



L 15321-65
ACCESSION NR: AP4047012

much more susceptible to hot cracking. Electroslag or vacuum melting considerably reduces this susceptibility but does not eliminate it completely, especially in welding rigid articles and with boron content of about 0.009%. Orig. art. has: 8 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MM, IE

NO REF SOV: 004 OTHER: 000 ATD PRESS: 3138

Card 2/2

MATSNEV, G. M.

MATSNEV, G. M. "Investigation of the Problem of Using Females Who Have Given Birth Once in Commercial Swine Raising." Moscow Order of Lenin Agricultural Academy imeni K. A. Timiryazev. Moscow, 1955. (DISSERTATION FOR THE DEGREE OF CANDIDATE IN AGRICULTURAL SCIENCE).

Knizhnaya Letopis'.
No. 27, July 2, 1955.

MATSNEV, K.E., inzhener-ekonomist.

Using the system of business accounting in the Smolensk post office.
Vest. sviazi 17 no.4:12-13 Ap '57. (MLRA 10:5)
(Smolensk--Postal Service--Accounting)

MATSNEV, Konstantin Nikolayevich; SHAMANAYEV, I.P., otv.red.; SIDOROVA, T.S., red.; KARABILOVA, S.P., tekhn.red.

[Organization of work in the communications department] Organizatsiia raboty v otdelenii sviazi. Moskva, Gos.izd-vo lit-ry po voprosam sviazi i radio, 1960. 42 p. (MIRA 13:10)
(Telecommunication)

ZHIVOV, M.; MATSNEV, L.

Improve the quality of designs. NTO 5 no.10:49-50 O '63.
(MIRA 17:1)

1. Predsedatel' soveta nauchno-tekhnicheskogo obshchestva Tresta po proizvodstvu elektromontazhnykh rabot v rayonakh TSentra (for Zhivov). 2. Uchenyy sekretar' nauchno-tekhnicheskogo obshchestva Tresta po proizvodstvu elektromontazhnykh rabot v rayonakh TSentra (for Matsnev).

FROLOV, Yu.M., inzh.; MATSNEV, L.M., inzh.

Hand welding of aluminum box-shaped busducts. Mont. i spets. rab. v stroi. 25 no.3:15-16 Mr '63. (MIRA 16:2)

1. Vsesoyuznyy trest po elektrifikatsii promyshlennykh predpriyatiy tsentral'nykh rayonov SSSR.
(Bus conductors (Electricity)—Welding)

SHURYGIN, V.P., kand.tekhn.nauk; IVANTSOV, M.G., inzh.; KLEYMAN, V.M., inzh.; MATSNEV, N.F., inzh.; FINTUSHAL', F.V., inzh.; MUKHRANOV, M.A., inzh.; NIKOLAYEV, N.P., inzh.; ANOSHKIN, A.I., inzh.; PILIPENKO, M.I., mekhanizator SMP-205; SAVIN, V.D., mekhanizator SMP-205

"Over-all mechanization of construction in railroad electrification" by A.P. Alekseev. Reviewed by V.P. Shurygin and others. Transp. stroi. 11 no.8:59-60 Ag '61. (MIRA 14:9)
(Railroads--Electrification)
(Alekseev, A.P.)

MATSNEV, N.I., inzhener

The first diesel locomotive with a Fairbanks-Morse engine. Tekh. shel.dor.6 no.8:30-31 Ag'47. (MLRA 8:12)
(Diesel locomotives)

MATSNEV, V.D.

CHUVERIN, Yu.I., kand. tekhn. nauk; MATSNEV, V.D., insh.

Results of tests performed on the modified joint connections of the N8 electric locomotive. Vest. TSNII MPS 17 no.1:30-34 F '58. (MIRA 11:3)
(Electric locomotives--Testing)

MATSNEV, V.D., inzh.; CHUVERIN, Yu.I., kand. tekhn. nauk

Protection of electric locomotive engines during regenerative braking and in a weak field of the traction system. Vest. TSNII MPS 18 no.7:13-17 N '59. (MIRA 13:2)
(Electric locomotives)

MATSNEV, V.D., inzh.

Quick acting protection of locomotives from short-circuit currents during regenerative braking. Trudy TSNII MPS no.172: 4-26 '59. (MIRA 13:2)
(Diesel locomotives)

MATSNEV, V.D., insh.

Investigating the protection of traction motors from short-circuit currents during regenerative braking. Trudy TSNII MPS no.158:82-112 '60. (MIRA 14:2)
(Electric railway motors) (Electric railroads—Brakes)

MATSNEV, V.D., kand.tekhn.nauk; ZAGORDAN, N.M., inzh.

Magnitude of the test voltage of the insulation of the electric train rolling stock. Elek. i tepl.tiaga 7 no.11:6-8 N '63. (MIRA 17:2)

MATSNEV, V.N.

6(0) PHASE I BOOK EXPLOITATION SOV/2800

USSR. Ministerstvo svyazi. Tekhnicheskoye upravleniye

Novyye razrabotki po organizatsii pochtovoy svyazi; informatsionnyy sbornik (New Developments in the Organization of Postal Communication; Collection of Informational Articles) Moscow, Svyaz'izdat, 1958. 166 p. (Series: Tekhnika svyazi) Errata slip inserted. 8,600 copies printed.

Additional Sponsoring Agency: USSR. Ministerstvo svyazi. Tsentral'nyy nauchno-issledovatel'skiy institut.

Resp. Ed.: A. Ye. Vasenin; Ed.: R.A. Kaz'mina; Tech. Ed.: K. G. Markoch.

PURPOSE: This book is intended for post office workers.

COVERAGE: This collection of articles discusses efforts of the Central Scientific Research Institute of Communications

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to organize and mechanize work processes in postal service establishments. It describes the organization of postal functions and ways to determine the efficiency of mechanized operations. Some articles discuss future development of the postal service. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

New Developments SOV/2800

Barsuk, V. A. Method of Determining the Efficiency of Mechanized Parcel Sorting 130

Kostromina, A. G., and N. D. Nosonovich. System of Organizing and Mechanizing Production Processes for Expediting Periodicals in Large Postal Service Establishments

AVAILABLE: Library of Congress (HE 6237 .R85)

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1-6-60

SOV/111-58-4-16/34

AUTHOR: Matsnev, V.N., Laboratory Chief of TsNIIS

TITLE: Some Conclusions from the Analysis of Mail Exchange Flow (Nekotoryye vyvody iz analiza potokov pochtovogo obmena)

PERIODICAL: Vestnik svyazi, 1958, Nr 4, pp 15 - 16 (USSR)

ABSTRACT: A further improvement in the mail service is impossible without a systematic study of mail flow. In Oct 1956, the USSR Ministry of Communications organized an investigation of the inter-oblast mail flow. The "Tsentral'nyy nauchno-issledovatel'skiy institut svyazi" (Central Scientific Research Institute of Communications) processed and evaluated the collected material. The results of the analysis showed the necessity for developing systems for channeling the mail into the proper directions. The author points out that a concentration of transit mail is observed at the Moscow, Leningrad and Kharkov mail centers, whereby the Moscow

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Some Conclusions from the Analysis of Mail Exchange Flow

mail center has to carry the heaviest load. The author makes recommendations based on such results as to the use of mail coaches and mail trains.

ASSOCIATION: TsNIIS

1. Mail--Handling 2. Communication systems--Effectiveness

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32(3) SOV/111-59-3-17/26

AUTHOR: Matsnev, V.N., Chief

TITLE: The Effectiveness of Container Transport for Post on Main Railway Lines (Effektivnost' konteynernykh perevozok pochty po magistral'nym zheleznodorozhnym liniyam)

PERIODICAL: Vestnik svyazi, 1959, Nr 3, pp 29-31 (USSR)

ABSTRACT: The article analyzes some general problems of the organization and effectiveness of using containers for parcel post on main railway lines, based on work at TsNIIS, done on assignment from the main postal administration of the Ministry of Communications of the USSR, with the object of working out a system of organization and mechanization of container transport for parcels on the main railway lines. The author reports that earlier the main postal administration had charged the laboratory of the Moscow administration of postal transport with developing a system of parcel transportation in containers between postal transport offices (PTO) of the Moscow center. Trial

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The Effectiveness of Container Transport for Post on Main Railway Lines

transport of parcels in containers between several PTOs of the Moscow center begun in 1958, proved the effectiveness of this measure. Use of the containers assumes the application of mechanization to the loading and unloading processes at various points on the parcel route. The author concerns himself with the problems of choosing optimum capacity and dimensions of the containers to be used, the means of mechanization for their loading, unloading, and transportation, calculation of the space exploitation, capacity of mail cars and vans, and computation of the effectiveness, and establishing the limits to the expediency of container transport. After detailed analysis the author concludes that a capacity (M) between 30 and 40 parcels will be optimum. At M=30 labor expended in loading and unloading will be minimum. Internal volume of the container is determined by formula, and outside dimensions must take into con-

The Effectiveness of Container Transport for Post on Main Railway Lines

sideration the use of available space in mail cars, their loading capacity, etc. Finally the author concludes that M=40 is the optimum capacity in parcels for containers, except where mixed shipment i.e. parcels in and out of containers, or stacking (2 layers) of containers is contemplated, in which cases M=30 parcels is recommended. The balance of the article is devoted to consideration of the effectiveness of container transport of parcels in terms of the following: labor expended, productivity of labor, speed of loading and unloading operations and transportation, operational expenses, and cost. Using containers at ten centers along the Moscow-Vladivostok line, productivity of workers in loading-unloading operations increased 5-1/2 times; speed of loading and unloading at mail cars increased by 7-1/2 times. Cost, on the same line, is lower by 20%. The author sees a further growth in effec-

The Effectiveness of Container Transport for Post on Main Railway Lines

tiveness with a growth in the number of lines and centers using containers. Expedience of using containers is determined in terms of the cost of loading-unloading operations as related to the flow of parcels and the distance of shipment, for which relationship the author presents a nomogram (Figure 3), by means of which limits to the effectiveness of using containers, for given values of flow and distance, may be estimated. The author adds that use of containers for shipment of parcels in groups on railways and intra-city routes will result in saving 9.7 million rubles per year in loading-unloading operations. In conclusion the author raises several questions: choice of routes, and compilation of a flow diagram and selection of centers and points of exchange to be included in a scheme of container transport; determination of circulation time.

The Effectiveness of Container Transport for Post on Main Railway Lines

and calculation of the necessary number of containers, and lastly questions of mechanization. Following this, he adds, handling processes, and exchange of containers at centers, in exchange points and mail cars will have to be worked out, and appropriate recommendations for the equipment of the centers and exchange points decided on. There are 3 graphs.

ASSOCIATION: Laboratoriya TsNIISa (The TsNIIS Laboratory)

6 (2) SOV/111-59-10-12/23

AUTHOR: Matsnev, V.N., Chief

TITLE: The Effectiveness of Introducing New Mechanization Facilities for Package Sorting in Post Offices

PERIODICAL: Vestnik svyazi, 1959, Nr 10, pp 19-20 (USSR)

ABSTRACT: This article deals with the effectiveness of using equipment for mechanization of the package sorting process at post offices. The author seeks to establish the limits of effectiveness for various degrees of mechanization in railway post offices handling different package loads in a larger or smaller number of directions. Analysis of the variables involved is outlined, and expressions for the relations between these factors presented. The use of two particular types of equipment - lamellar sorting conveyers (SPT) and semi-automatic sorting equipment (UDSP) - is considered in the author's computations. Using the formulae presented, the costs of package sorting was computed. Calculations showed, states the author, that the most effective utilization of SPT and UDSP for package sorting is limited to 36% of existing post offices, which

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The Effectiveness of Introducing New Mechanization Facilities for Package Sorting in Post Offices

handle 55% of the total package flow for the country as a whole; processing the remaining part of the package flow (186,000 units per day on the average) by these machines alone is not expedient. The use of both mechanized and manual package sorting, i.e. the combined sorting method, is briefly discussed. The relation between the cost of manual, mechanized and combined methods of sorting, and the number of packages and sorting directions is presented graphically (Fig 1). The limits of effectiveness for manual, mechanized and combined sorting methods are illustrated in a second graph (Fig 2), and presented in terms of the number of packages and sorting directions. The author briefly discussed the expediency of using various degrees of mechanization in large or smaller post offices in terms of these graphs. In conclusion the author states that knowledge of these limits will be an aid to rational organization of the sorting process and the choice of the proper mechanization facilities for a gi-

SOV/111-59-10-12/23

The Effectiveness of Introducing New Mechanization Facilities for Package Sorting in Post Offices

ven post office. There are 2 graphs.

ASSOCIATION: Laboratoriya tsentral'nogo nauchno-issledovatel'skogo instituta svyazi (TsNIIS) (Laboratory of the Central Scientific-Research Institute of Communications)

Card 3/3

MATSNEV, Vladimir Nikolayevich; NIKIFOROV, Ivan Aleksandrovich; AMENTOV, B.K., otv. red.; SIDOROVA, T.S., red.; SLUTSKIN, A.A., tekhn. red.

[Mail transportation in containers and its efficiency] Perevozka pochty v konteinerakh i ee effektivnost'. Moskva, Sviaz'izdat, 1961. 27 p. (MIRA 15:6)
(Postal service)

MATSNEV, V.N., kand.ekonom.nauk; GIL', G.K., starskiy inzh.

Organization of large-scale postal communications having on large mechanized centers. Vest. sviazi 21 no.3:24-26 '61. (MIRA 14:6)

1. Nachal'nik laboratorii TSentral'nogo nauchno-issledovatel'skogo instituta svyazi (for Matsnev). 2. TSentral'nyy nauchno-issledovatel'skiy institut svyazi (for Gil').
(Postal service)

MATSNEV, V.N.

Use every means to improve mail transportation. Vest. sviazi 22 no.10:11-12 O '62. (MIRA 15:11)

1. Zamestitel' nachal'nika Glavnogo pochtovogo upravleniya Ministerstva svyazi SSSR.

(Postal service)

GIL', Gennadkiy Kivovich; MATSNEV, Vladimir Nikolayevich; NIKIFOROV, Ivan Aleksandrovich; YURASOVSKIY, Georgiy Aleksandrovich; NAUMOV, V.A., otv.red.; KAZ'MINA, R.A., red.; TRISHINA, L.A., tekhn. red.

[Main postal line of the U.S.S.R.] Magistral'naia pochtovaia sviaz' SSSR. Moskva, Sviaz'izdat, 1963. 95 p. (MIRA 16:7)
(Postal service)

MATSNEV, V.N.

Let's speed up the delivery of mail and printed matter to the public. Vest. sviazi 23 no.6:1-3 Je '63. (MIRA 16:8)

1. Zamestitel' nachal'nika Glavnogo pochtovogo upravleniya Ministerstva svyazi SSSR.

MATSNEVA, L.I. (Moskva, I-110, prospekt Mira, d.47, kv.12)

Significance of roentgenological determination of the degree of displacement of a cancer-affected stomach. Vop. onk. 10 no.1: 34-40 '64. (MIRA 17:11)

1. Iz rentgenodiagnosticheskogo otdeleniya (zav. - prof. Ye.E. Abarbanel') Gosudarstvennogo onkologicheskogo instituta imeni Gertsena (dir. - prof. A.N. Novikov).

PODOL'SKAYA, Ye.Ya.; MATSNEVA, L.I.

Role of various X-ray and clinical symptoms and examination methods in the diagnosis of peripheral pulmonary cancer. Khirurgiia 41 no.4: 17-23 A- '65. (MIRA 18:5)

1. Rentgeno-diagnosticheskoye otdeleniye (zav. - doktor med. nauk Ye.A. Likhtenshteyn) Onkologicheskogo instituta imeni Gertsena, Moskva.

MATSNEVA, N.M.; TILLIS, A.Yu., doktor meditsinskikh nauk

Secretory and motor function of the stomach in peptic ulcer patients following plasmotherapy. Med.zhur. Uzb. no.11:50-56 N '60.
(MIRA 14:5)

1. Iz Uzbekskogo nauchno-issledovatel'skogo instituta gematologii i perelivaniya krovi gospital'noy khirurgicheskoy kliniki sanitarnogo i pediatricheskogo fakul'tetov (zav. - prof. V.K. Yasevich) Tashkentskogo gosudarstvennogo meditsinskogo instituta.
(PEPTIC ULCER) (BLOOD PLASMA)

MATSOKIN, V.I.

AKELITSKAYA, R.D.; GRACH'YAN, A.N.; MATSOKIN, V.I.; PONOMAREV, I.F.; PRIKHODCHENKO, N.A.; KHRIPKOVA, G.K.

"Handbook on the technology of binding materials." IU.M.Butt. Reviewed by R.D.Akelitskaia and others. Tsement 20 no.5:32-33 S-O '54. (MLRA 7:11)

1. Kafedra tekhnologii tsementa Novocherkasskogo politekhnicheskogo instituta im. S.Ordzhonikidze.
(Building materials)

SKALOZUBOV, M.F.; MATSKIN, V.I.

Radiometric determination of surface area of dispersed and porous substances. Zhur. prikl. khim. 31 no.9:1429-1431 S '58.
(MIRA 11:10)

1.Novocherkasskiy politekhnicheskiy institut.
(Radiochemistry) (Surface chemistry)

SKALOZUBOV, M.F., dotsent, kand.tekhn.nauk; MATSOKIN, V.I., assistent

Radiometric determination of the surface of the active material of lead accumulators. Trudy MPI 47:131-138 '58. (MIRA 13:5)
(Isotopes) (Storage batteries)

S/263/62/000/014/003/006
I007/I207

AUTHOR: Kukoz, F. I., Kukoz, L. A. and Matsokin, V I.

TITLE: Measurement of ultrasonic intensity in liquids

PERIODICAL Referativnyy zhurnal, otdel'nyy vypusk. 32. Izmeritel'naya tekhnika, no. 14, 1962, 23, abstract 32.14.150. In collection Prom. primeneniye ul'trazvuka Kuybyshevsk. aviats. in-t, Kuybyshev, 1961, 49–56

TEXT: Apparatus and methods are described for measuring integral acoustic power and local intensity of an ultrasonic field, as well as for investigations on the influence of ultrasonic waves on electrochemical processes. Comparison is made of the results of measuring ultrasonic intensity by calorimetric, thermoelectric and piezometric methods (the latter developed by the authors), and the piezometric technique for calibration of ultrasonic probes is outlined. Measurements were carried out at a sound frequency of 0.7 to 1 5 Mcs and a sound intensity of 5 w/cm^2. Maximum errors with the calorimetric methods amount to 20–30%; with the piezometric methods the error is only 10%. There are 6 figures and 21 references.

[Abstracter's note: Complete translation.]

Card 1/1

L 1R219-65 EWT(1)/T/EWP(k) Pr-4/Pi-4 ASD(p)-3/AFETR MLK

ACCESSION NR: AT5001222 S/0000/61/000/000/0049/0056

AUTHOR: Kukoz, F. I.; Kukoz, L. A.; Matsokin, V. I. B+1

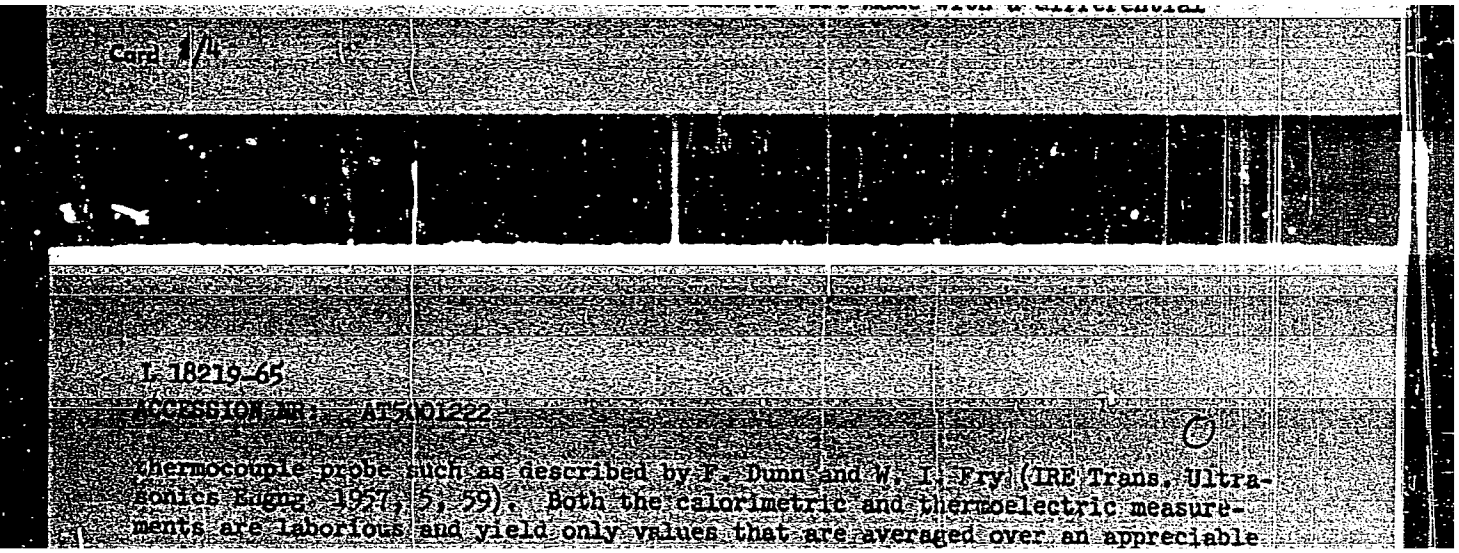
TITLE: Measurement of the intensity of ultrasound in a liquid

SOURCE: Vsesoyuznaya mezhvuzovskaya konferentsiya po promyshlennomu primeneniyu

[redacted]; Study Recipients]. - Kuybyshev, 1961, 49-56

TOPIC TAGS: [illegible] ultrasound, ultrasonic field, measurement method, calorimetric method, [illegible]moelectric method, piezometric method

ABSTRACT: In view of the lack of published procedures for the measurement of acoustic power and its local intensity, the authors compare measurement results obtained by calorimetric, thermoelectric, and piezometric methods, and describe a new simple method for the calibration of ultrasonic probes. The measurements were made at frequencies 0.7--1.5 Mcs and intensities 0.2--5 W/cm^2. In the calorimetric method the ultrasound power was measured by determining the heat rise in a volume of water irradiated by the ultrasound. The measurement accuracy was 20--30%. The thermoelectric measurements were made with a differential



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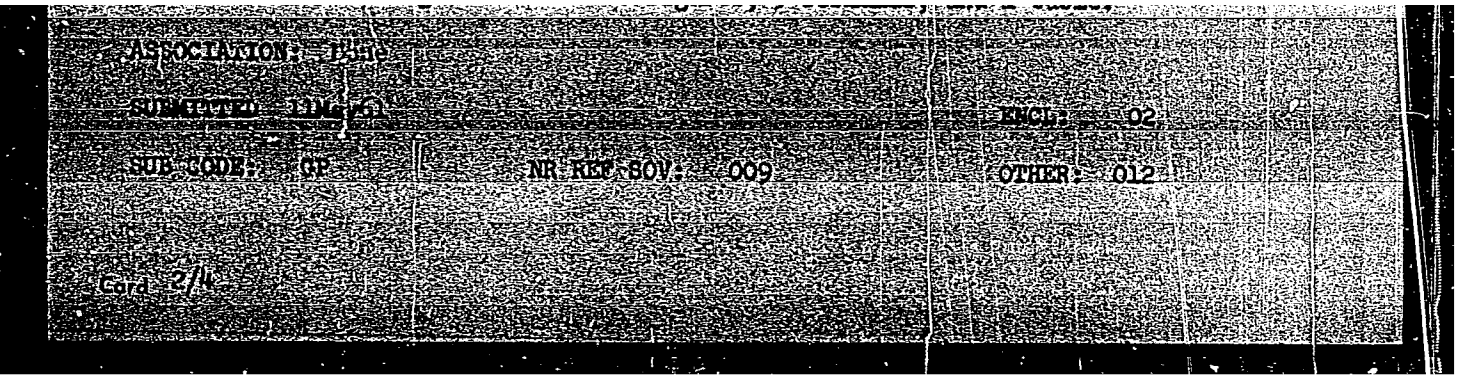
L 18219-65

ACCESSION NR: AT5001222

thermocouple probe such as described by F. Dunn and W. J. Fry (IRE Trans. Ultrasonics Engng. 1957, 5, 59). Both the calorimetric and thermoelectric measurements are laborious and yield only values that are averaged over an appreciable



L 18219-65
ACCESSION NR: AT5001222

EXPOSURE: 01

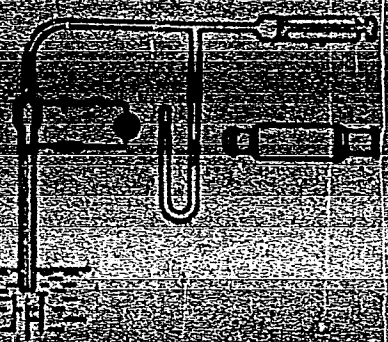


Fig. 1. Diagram of [illegible] for ultrasound intensity

Card 3/4

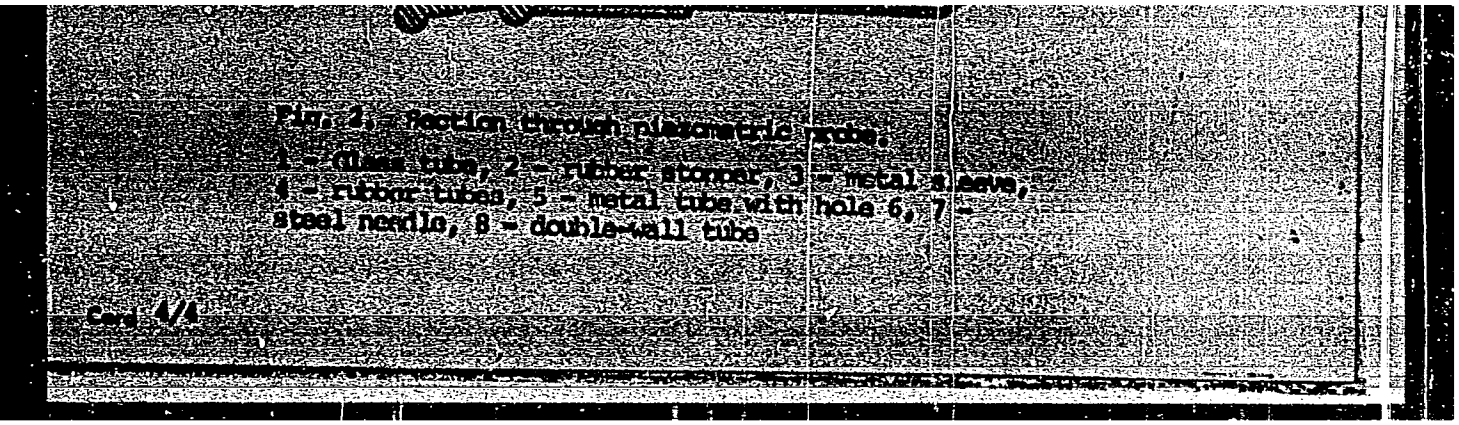


Fig. 2. - Section through pleiometric probe.
1 - glass tube, 2 - rubber stopper, 3 - metal sleeve,
4 - rubber tubes, 5 - metal tube with hole 6, 7 -
steel needle, 8 - double-wall tube

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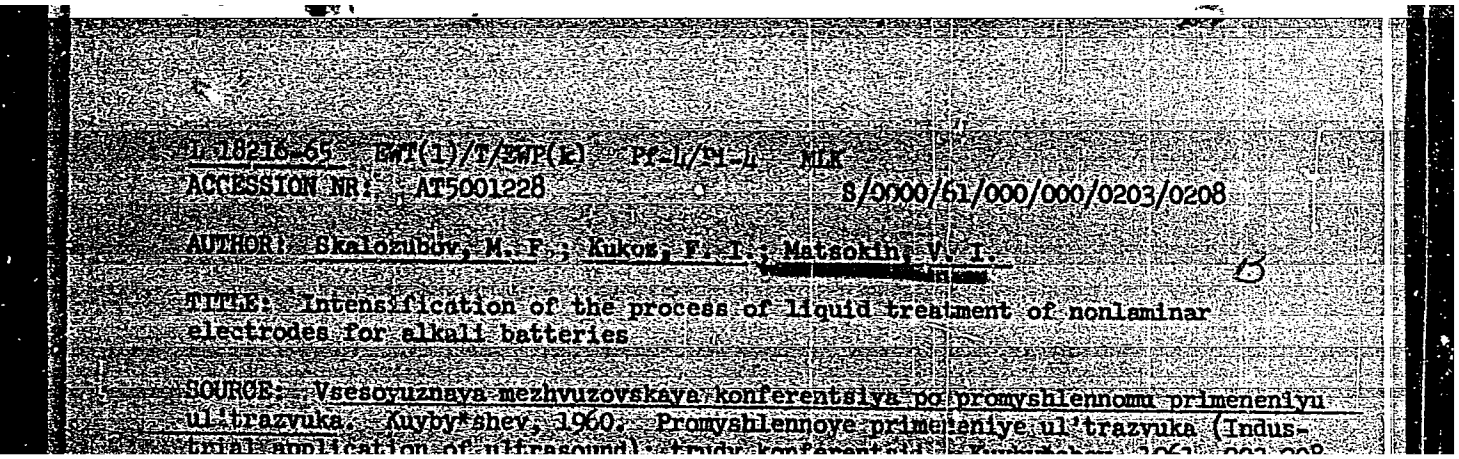


L 18216-65 EWT(1)/T/EWP(t) Pr-4/Pi-4 MLK

ACCESSION NR: AT5001228 S/0000/61/000/000/0203/0208

AUTHOR: Skalozubov, M. F.; Kukos, F. I.; Matsokin, V. I.

TITLE: Intensification of the process of liquid treatment of nonlaminar electrodes for alkali batteries

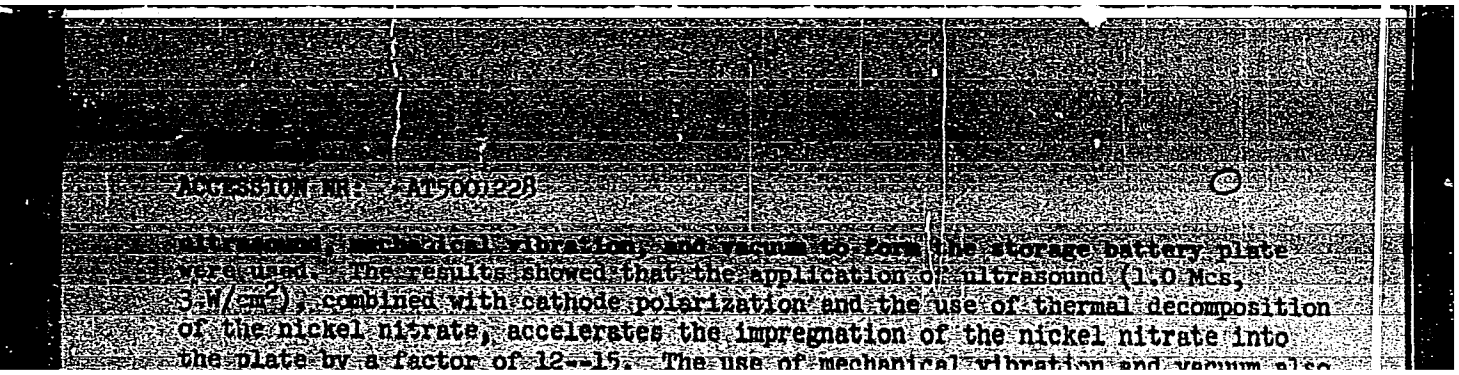
SOURCE: Vsesoyuznaya mezhvuzovskaya konferentsiya po promyshlennomu primeneniyu ul'trazvuka. Kuybyshev, 1960. Promyshlennoye primeneniye ul'trazvuka (Indus-

...ultrasonic application of ultrasound); trudy konferentsii, Kuybyshev, 1961, 203-208

TOPIC TAGS: alkali storage battery, battery electrode, electrode processing, ultrasound effect

ABSTRACT: After pointing out that the preparation of non-laminary electrodes for alkali storage batteries is a laborious and time consuming operation, the authors report the results of tests aimed at obtaining data on the effect of diffusion, deceration, and osmosis on the rate at which a metal-ceramic base electrode can be filled with the active mass, and how ultrasonic vibration can accelerate these processes. A technique consisting of combining the action of

Card 1/2



ACCESSION NR: AT5001228

Ultrasound, mechanical vibration, and vacuum to form the storage battery plate were used. The results showed that the application of ultrasound (1.0 Mcs, 3 W/cm^2), combined with cathode polarization and the use of thermal decomposition of the nickel nitrate, accelerates the impregnation of the nickel nitrate into the plate by a factor of 12--15. The use of mechanical vibration and vacuum also

with allowance for economic factors. Orig. art. has: 3 figures and 1 table.

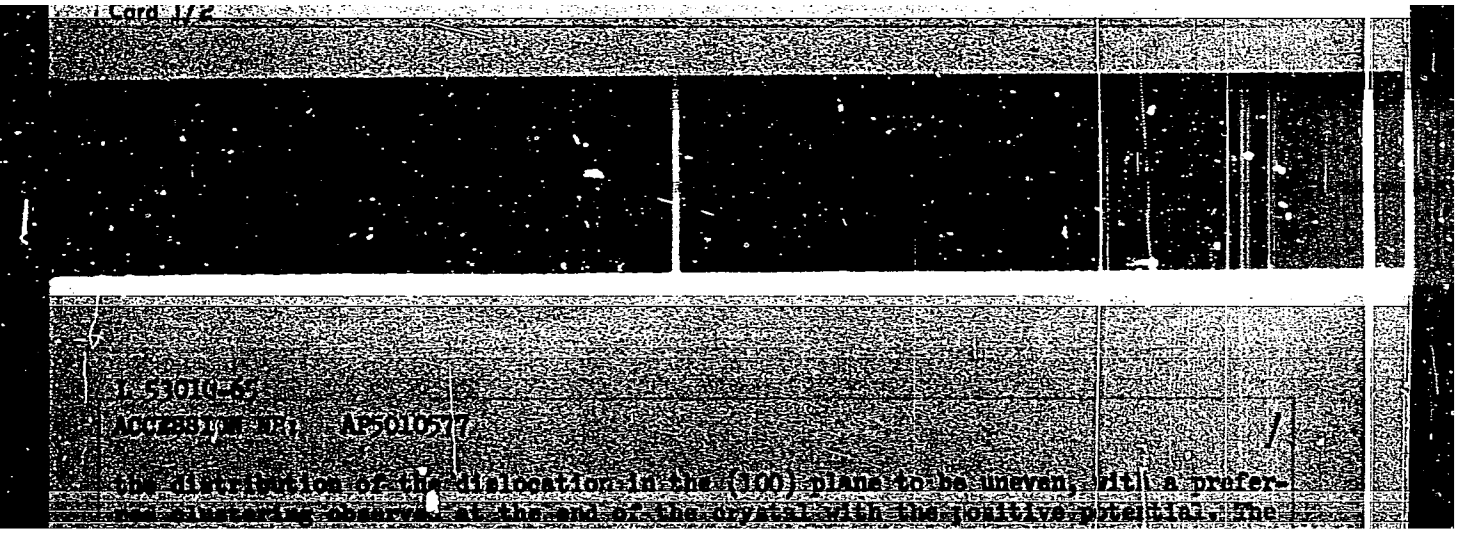
ASSOCIATION: None

SUBMITTED: 11May61 ENCL: 00

SUB CODE: GP, EE NR REF SOV: 000 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932920002-9"



the distribution of the dislocation in the (100) plane to be uneven, it a prefer-

Reminder: Orig. art. has: 2 figures.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet im. A. M. Gor'kogo (Khar'kov State University)

SUBMITTED: 07Jan65 ENCL: 00 SUB CODE: SS, TD

NR REF SOV: 002 OTHER: 001

Card 2/2

L 01825-67 EWT(1)/EWT(m)/T/EWP(t)/ETI IJP(c) JD/GG

ACC NR: AP6030952 SOURCE CODE: UR/0181/66/008/009/2558/2565 44

AUTHOR: Geguzin, Ya. Ye.; Matsokin, V. P. 43 B

ORG: Khar'kov State University im. A. M. Gor'kiy (Khar'kovskiy gosudarstvennyy universitet)

TITLE: The "disintegration" effect in dislocation boundaries in high-temperature annealing of crystals under stress 21

SOURCE: Fizika tverdogo tela, v. 8, no. 9, 1966, 2558-2565

TOPIC TAGS: crystal dislocation, crystal deformation, dislocation, boundary, dislocation boundary, high temperature deformation, crystal annealing, high temperature annealing

ABSTRACT: The authors determined experimentally the "disintegration" effect of dislocation boundaries in crystals in which stress is maintained from the outside by an applied force. The considerations presented by the authors on the mechanism of this phenomenon are substantiated by experiments on the high-temperature deformation of dislocated crystals as in pure four-point flexure. An analysis is given of the relative role of the mechanism of diffusional "ascent" and sliding in the

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L 01825-67

ACC NR: AP6030952

"disintegration" process. The authors express their gratitude to V. V. Indenbom for a discussion of the experiments conducted. Orig. art. has: 6 formulas, 1 table, and 8 figures. [Authors' abstract] [SP]

SUB CODE: 20/ SUBM DATE: 03Jan66/ ORIG REF: 002/ OTH REF: 004/

Card 2/2 fv

MATSOKINA-VORONICH, T.M.

Discovery of franckeite. Zap.Uz.otd.Vses.min.ob-va no.6:117-119 '54. (MLRA 9:12)

1. Uzbekskoye geologicheskoye upravleniye.
(Franckeite)

BAYMUKHAMEDOV, Kh.N.; MATSOKINA, T.M.; SALOV, P.I.; URAZAYEV, B.M.; KHAMRABAYEV, I.Kh.; CHIKUNOV, V.S.

Letter to the editor. Izv. AN SSSR Ser.geol.21 no.3:111-114 Mr '56. (Ore deposits) (MLRA 9:7)

ABDULLAYEV, Kh.M., akademik; ADELUNG, A.S.; VORONICH, V.A.; GOR'KOVOY, O.P.; KALABINA, M.G.; MALAKHOV, A.A.; MATSOKINA, T.M.; MIRKHODZHAYEV, I.M.; RADZHABOV, F.Sh.; TUMASHEVSKAYA, E.S., red.izd-va; GOR'KOVAYA, Z.P., tekhn.red.

[Principal features of magmatism and metallogeny in the Chatkal-Kurama mountain ranges] Osnovnye cherty magmatizma i metallogenii Chatkalo-Kuraminskikh gor. Pod obshchei red. Kh.M.Abdullaeva. Tashkent, Izd-vo Akad.nauk Uzbekskoi SSR, 1958. 288 p. (MIRA 11:7)

1. Akademiya nauk Uzbekskoy SSR (for Abdullayev)
(Chatkal Mountain Range--Mineralogy)
(Kurama Mountain Range--Mineralogy)

BATALOV, A.B.; BAYMUKHAMEDOV, Kh.N.; GAR'KOVETS, V.G.; ISAMUKHAMEDOV, I.M.; KUCHUKOVA, M.S.; MALAKHOV, A.A.; MATSOKINA, T.M.; MIRKHOLZHAYEV, I.M.; MUSIN, R.A.; PETROV, N.P.; TULYAGANOV, Kh.T.; KHAMRAYEV, I.Kh.

Winner of the Lenin Prize. Uzb.geol.zhur. no.2:94-96 '59.
(MIRA 12:8)
(Abdullaev, Khabib Mukhamedovich)

MATSOKINA-VORONICH, T.M.; BORISOV, O.M.

Petrologic and metallogenic research in 1960 in the laboratory of the Metallogenic Institute of Geology of the Academy of Sciences of Uzbek S.S.R. Uzb. geol. zhur. no.2:86-88 '61. (MIRA 14:5)
(Uzbekistan--Mineralogical research)

KHAMRABAYEV, I.Kh.; MATSOKINA, T.M.; MIRKHODZHAYEV, I.M.; MUSIN, R.A.

Postmagmatic manifestations in western Uzbekistan and the Chatkal-Kurama region. Zap. Uz. otd. Vses. min. ob-va no.14: 5-12 '62. (MIRA 16:7)

(Uzbekistan—Rocks, Igneous)
(Kurama Range—Rocks, Igneous)
(Chatkal Range—Rocks, Igneous)

MATSOKINA, T.M.; VORONICH, V.A.

Conference on the methods of compiling metallogenic and prognostic maps. Uzb.geol.zhur. 7 no.1:47-48 '63. (MIRA 16:4)

1. Institut geologii AN UzSSR.
(Geology—Maps)

BATALOV, A.B.; BRAGIN, K.A.; ISMAILOV, M.I.; KASIMOV, A.K.; KAKHKHAROV, A.K.; KUCHUKOVA, M.S.; MATSOKINA, T.M.; MIRKHODZHAYEV, I.M.; MUSIN, R.A.; PETROV, N.P.; PLATONOVA, N.A.; RABAYEVA, E.Ye.; [illegible]RAKOV, I.V.; SMORODINOVA, D.D.; KHAMRABAYEV, I.Kh.

In memory of Mannon Khamidovich Khamidov. Uzb.geol.zhur. 7 no.1:49 '63. (MIRA 16:4)

(Khamidov, Mannon Khamidovich, 1928-1962)

ABDULLAYEV, Khabib Mukhamedovich, laureat Leninskoy premii, akademik (1912-); MAVLYANOV, G.A., akademik, glav. red.; BAYMUKHAMEDOV, Kh.N., doktor geol.-miner. nauk, prof., otv. red. toma; KHMRABAYEV, I.Kh., doktor geol.-miner. nauk, red.; BORISOV, O.M., kand. geol.-miner. nauk, red.; GOR'KOVOY, O.P., kand. geol.-miner. nauk, red.; KUCHUKOVA, M.S., kand. geol.-miner. nauk, red.; MATSOKINA, T.M., kand. geol.-miner. nauk, red.; MUSIN, R.A., kand. geol.-miner. nauk, red.; PETROV, N.P., kand. geol.-miner. nauk, red.; LYUBETSKAYA, R.Kh., red.; NURATDINOVA, M.R., red.

[Collected works] Sobranie sochinenii. Tashkent, Izd-vo "Nauka" UzSSR. Vol.1. 1964. 493 p. (MIRA 17:6)

1. AN Uzbekskoy SSR i chlen-korespondent AN SSSR (for Abdullayev). 2. AN Uzbekskoy SSR (for Mavlyanov).

ABDULLAYEV, Kh.M.; MUSIN, R.A., kand. geol.-min. nauk, otv. red.; MAVLYANOV, G.A., akademik, glav. red.; BAYMUKHAMEDOV, Kh.N., doktor geol.-min. nauk, red.; KHAMRABAYEV, I.Kh., doktor geol.-min. nauk, red.; BORISOV, O.M., kand. geol.-min. nauk, red.; GOR'KOVOY, O.I., kand. geol.-min. nauk, red.; KUCHUKOVA, M.S., kand. geol.-min. nauk, red.; MATSOKINA, T.M., kand. geol.-min. nauk, red.; SPEKTOR, L.Ye., red.

[Collected works] Sobranie sochinenii. Tashkent, Nauka, Uzbekskoi SSR. Vol.3. 1964. 448 p. (MIRA 18:2)

1. Akademiya nauk Uzbekskoy SSR (for Mavlyanov).

MATSOKINA-VORONICH, T.M., kand. geol.-miner. nauk, otv. red.; VORONICH, V.A., kand. geol.-miner. nauk, red.; KNAUF, V.I., kand. geol.-miner. nauk, red.; FEDORCHUK, V.P., doktor geol.-miner. nauk, red.; KALABINA, M.G., red.; NURATDINOVA, M.R., red.

[Problems of the methods of plotting the metallogenetic and prognostic maps of Central Asia; materials] Voprosy metodiki sostavleniia metallogenicheskikh i prognoznykh kart Srednei Azii; materialy. Tashkent, Nauka, 1964. 274 p. (MIRA 18:6)

1. Sredneaziatskoye soveshchaniye po metodike sostavleniya metallogenicheskikh i prognoznykh kart. 1st, 1962. 2. Institut geologii i geofiziki im. Kh.M.Abdullayeva AN Uzbekskoy SSR (for Matsokina-Voronich). 3. Glavnoye upravleniye geologii i okhrany nedr pri Sovete Ministrov Uzbekskoy SSR (for Kalabina).

MATSONASHVILI, B.N.

Dielectric properties of alkali halide single crystals. Zhur.eksp. i teor. fiz. 31 no.6:1110-1111 D '56. (MLRA 10:3)

1. Fizicheskiy institut im. P.N.Lebedeva Akademii nauk SSSR.
(Alkali halide crystals)

MATSONASHVILI, B. N.

MEIJER, Donald H., red.; KAZARNOVSKIY, M.V. [translator]; TIKHOMIROV, F.A. [translator]; ARNOL'D, N.A. [translator]; PETRUKHIN, V.I. [translator]; MATSONASHVILI, B.N. [translator]; AKSENOV, S.I. [translator]; BAKANOV, S.P. [translator]; SHAPIRO, I.S., red.; ADIROVICH, E.I., red.; MEDVEDEV, Yu.T., red.; MAKHINSON, I.G., red.; TELESNIN, N.L., red.; BELEVA, M.A., tekhn.red.

[Fundamental formulas of physics. Translated from the English] Osnovnye formuly fiziki. Moskva, Izd-vo inostr. lit-ry, 1957. 657 p. (MIRA 11:5)
(Mathematical physics)

MATSONASHVILI, B. N., Cand Phys-Math Sci -- (diss) "Dielectric losses in alkali-haloid crystals." Mos, 1958. 11 pp (Acad Sci USSR, Phys Inst im P. N. Lebedev), 125 copies (KL, 17-58, 105)

MATSONASHVILI, B.N., kand. fiz.-matem. nauk, otv. red.

[Papers delivered at the Second All-Union Conference on the Physics of Dielectrics] Tezisy dokladov Vtoroy Vsesoyuznoy konferentsii po fizike dielektrikov. Moskva, Izd-vo Akad. nauk SSSR, 1958. 90 p. (MIRA 15:2)

1. Vsesoyuznaya konferentsiya po fizike dielektrikov, 2d, Moscow, 1958.

(Dielectrics)

MATSONASHVILI, B. N.

Matsonashvili, B.N. [Fizicheskiy institut imeni P.N. Lebedeva AN SSSR (Physical Institute imeni P.N. Lebedev, AS USSR)] Dielectric Constant Conductivity and Dielectric Losses of Alkaline-Haloid Monocrystals

(The Physics of Dielectrics; Transactions of the All-Union Conference on the Physics of Dielectrics) Moscow, Izd-vo AN SSSR, 1958. 245 p. 3,000 copies printed.

This volume publishes reports presented at the All-Union Conference on the Physics of Dielectrics, held in Dnepropetrovsk in August 1956 sponsored by the "Physics of Dielectrics" Laboratory of the Fizicheskiy institut imeni Lebedeva An SSSR (Physics Institute imeni Lebedev of the AS USSR), and the Electrophysics Department of the Dnepropetrovskiy gosudarstvennyy universitet (Dnepropetrovsk State University).

AUTHOR: Matsonashvili, B. N. 48-22-3-16/30

TITLE: Dielectric Constant, Dielectric Losses and Electro-Conductivity of Alkaline Halogen Monocrystals (Dielektricheskaya proni - tsayemost', dielektricheskiye poteri i elektroprovodnost' shchelochno-galoidnykh monokristallov)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 1958, Vol. 22, Nr 3, pp. 296-308 (USSR)

ABSTRACT: Until recently experts were of opinion that the nature of the dielectric losses of alkaline-halogen crystals was clear. However, there are not yet any reliable experimentally obtained data confirming the presence of the relaxation losses in "pure" crystals. It is neither clear how many relaxation maxima exist on the tg δ-curves of the contaminated crystals. The object of the present work was to clear this. The factors causing these losses ought to be determined, too. Contrary to the previous tests, the dielectric losses were investigated in vacuum. Temperature- and frequency-curves of tgδ (lg tgδ : ^{o}K) as well as those of the conductivity were determined for the same samples. It was found that the values of tgδ of the hygroscopic samples depend only very little on the pressure

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in the evacuated system ($10^{-3} \div 10^{-5}$ mm mercury column), but very largely on the traces of humidity. With all pure crystals which were not submitted to any complementary thermal treatment, a relaxation maximum was observed as a rule on the curve of tg δ (figures 2 to 4). The tg δ-values (as well as λ) of different samples which were taken from one and the same monocrystal, were sometimes different. This seems to be due to the unequal distribution of the admixtures according to the height of the crystal. Complementary relaxation maxima are formed on the tg δ-curves of all contaminated crystals (figures 6 to 11). According to the frequency- and temperature curves of tg δ, the activation energies of the relaxation groups U_{rel} as well as the relaxation time τ were calculated (table 1) by means of usual methods (ref. 13). It is interesting to know that the taking account of the temperature dependence U_{rel} explains the fact observed during the experiment that the halfwidth of the relaxation maxima on the curves of the temperature-dependence of tg δ is smaller (in contrast to the half-width of the maxima on the curves of the dependence of frequency) than that resulting from the general theory of relaxation losses.

Dielectric Constant, Dielectric Losses and Electro-Conductivity 48-22-3-15/30
of Alkaline Halogen Monocrystals

The author examined the influence of thermal treatment in the vicinity of the melting point on the value of the loss angle of the dielectric losses $tg\,\delta$ and on the amount of conductivity (fig. 12) with some crystals. It results from the analysis (fig. 13) that the interaction $TK\varepsilon = CT^{3/2}$ is satisfied with a great number of crystals. T denotes the absolute temperature, C the characteristic constant of the crystal. It results from a comparison of the experimental $tg\delta_e$ values and the $tg\delta_l$ calculated according to the conductivity, that with acoustic frequency and at temperatures above ~50°C and with high frequencies, and over 150°C, the losses show an ohmic character with the same samples. For a great number of monocrystals $tg\,\delta$-values at room temperatures were determined. The $tg\,\delta$-values which were carried out on a device especially constructed for the measurements of low dielectric losses, proved to be of the order of $3 \text{ —— } 5.10^{-5}$. The measurements carried out under atmospheric donditions must be dealt with great precaution since otherwise certain "rules" which are caused by the hygroscopicity of the samples and not by structural peculiarities of the crystals, must be observed.

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Dielectric Constant, Dielectric Losses and Electro-Conductivity 48-22-3-16/30
of Alkaline Halogen Monocrystals

The polarographic analysis (carried out by Z. L. Morgenshtern and N. V. Kostina) showed that approximately 6 to 10% (per cents by weight) of the admixtures especially added to the molten mass enters the crystals. Moreover, considerable quantities of admixtures which penetrated in form of impurities, are observed (table 2). According to Zeyts, losses at low temperatures can be explained by the presence of complexes with small activation-energy the mobility of which depends only very little on the temperatures. The author thanks G. I. Skanavi for the discussion of the results obtained. There are 13 figures, 2 tables, and 21 references, 4 of which are Soviet.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Akademii nauk SSSR (Physics Institute imeni P. N. Lebedev, AS USSR)

AVAILABLE: Library of Congress

Card 4/4

1. Single crystals--Dielectric properties 2. Single crystals --Conductivity

(SOV/26-59-6-12/51

AUTHOR: Gubkin, A.N., Matsonashvili B.N., Candidates of Physico-Mathematical Sciences

TITLE: Physics of Dielectrics. Second All-Union Conference

PERIODICAL: Priroda, 1959, Nr 6, pp 57-61 (USSR)

ABSTRACT: The authors give a summary of the reports delivered at the Vtoraya vsesoyuznaya konferentsiya po fizike dielektrikov (Second All-Union Conference on the Physics of Dielectrics), which was held in Moscow towards the end of 1958. During the nineteen sessions of the conference, 92 reports were delivered which were subjects of general discussion. The conference was attended by about one thousand Soviet scientists and engineers and also by guests from the GDR, Poland, USA, France, ČSR and Switzerland. During the conference, all basic problems of the physics of dielectrics were touched upon: dielectric polarization and losses, electric conduct nce and disruptive discharge of dielectrics. As to the field

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Physics of Dielectrics. Second All-Union Conference

of dielectric polarization and losses, the reports can be roughly divided into reports, which, in addition to their experimental section, indicate new means to evaluate the experiment and purely experimental, and theoretical reports The reports belonging to the first group were of special interest for the scientists. A number of reports were dedicated to the problem of relaxed polarization, characteristic for many solid dielectrics. In the work of G.I.Skanavi and collaborators, the study of ceramic dielectrics of the system $SrTiO_3$ - $Bi_2O_3 \cdot nTiO_2$ was continued. It was shown that the solid solutions of bismuth titanate in strontium titanate do not have the qualities characteristic for seignette electrics, and therefore the authors of the report connect the extraordinarily great value of ε with relaxed polarization caused by weakly coupled ions. In another work

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Physics of Dielectrics. Second All-Union Conference

(G.A. Smolenskiy a.o.), relaxed polarization was studied on a number of artificially synthesized solid dielectrics of complicated composition. It was shown that these compounds are not seignette electrics, though they are characterized by a high specific inductive capacitance. In a number of reports Soviet physicists propounded the idea that the energy necessary for the formation of a crystal lattice determines its dielectric losses. M.P. Bogoroditskiy and other scientists however, observed that the defects of the lattice are the decisive factors in this case. The dielectric qualities of polymers are being studied by many Soviet scientists In the report of G.P. Mikhaylov and his collaborators results were obtained, from which it follows that in amorphous as well as crystalline polymers, within the range of superhigh frequencies, dielectric relaxation losses can be observed. Some reports were

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Physics of Dielectrics. Second All-Union Conference

concerned with phenomena related to polarization. F.I. Vergunas and other scientists, for instance, discussed the photoelectric effect in crystalline phosphorus. At the conference, attention was also paid to questions concerning the polarization of polar liquids. A [illegible] (Poland) reported on the investigation of dielectric polarization of liquid polar dielectrics in a strong electric field. Much interest was manifested in the qualities of barium titanate, a seignette electric of great practical importance By the report of S.V. Bogdanov and B.M. Vul, the audience was informed that unilateral pressure applied to a specimen of barium titanate changes its piezoelectric qualities. The analysis of the behaviour of solid dielectrics in strong electric fields and the disruptive discharge were problems which occupied a conspicuous place in the work of the conference The

SOV/26-59-6-1 /51

Physics of Dielectrics. Second All-Union Conference

Tomsk physicists A.A. Vorob'ev, G.A.Vorob'ev, M.A. Mel'nikov and others reported on the dependency of the voltage of the disruptive discharge on the time of voltage pulsing (time of exposition). A report on the mechanism of conductance in strong electric fields was delivered by K V Boer ("Bër") of the GDR. On the basis of an experiment carried out with a CdS crystal - the crystal was placed in a strong electric field - the author concluded, that previous to the disruptive discharge, the observed strong currents are connected with an increase of electric conductance through the entire width of the crystal, except the concentration points of the field. Concerning the theory of disruptive discharge, the report of V.A. Chuyenkov deserves mention By solving the kinetic Bolzmann ("Bol'tsman") equation, which describes the behaviour of the total of electrons in a solid body, the author found the electric strength destruction criterium of some solid dielectrics

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SOV/26-[illegible]-12/31

Physics of Dielectrics. Second All-Union Conference

Great attention was also paid to reports concerning the effect of radioactive irradiation on the dielectric qualities of a number of substances. It was shown, that in most cases the electric conductance, as well as the specific inductive capacitance and the dielectric losses, of solid and liquid dielectrics increase under the effect of ionizing radiation. As shown by one of the scientists, relaxed polarization can arise after treatment with slow neutrons. Finally the general reports of V L Ginzburg (electromagnetic waves in isotropic crystalline media) and I S Topygo (theory of not fully-polar crystals) deserve mentioning. There are 4 Soviet references

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